MEETING MINUTES

Jersey City Environmental Commission
City Hall – 280 Grove Street, Jersey City NJ 07302

Gerald F. Nicholls, Chair
Sara K. Schultzer, Vice Chair

Meeting: Special Meeting – Urban Tree Canopy Study

Date / Location: 18 November 2014 – 6:30 p.m.
Room 322, Law Department, City Hall, 280 Grove Street, Jersey City, NJ 07302

Attendees:

Commissioners/City Representatives	Public Participants
Tanya Marione-Stanton (JC Planning)	Amanda Khan (JCPC)
Naomi Hsu (JC Planning)	Andrew Walker (GIC)
Elizabeth Phillips-Lorenzo	Arvind Swarmy
Gerry Nicholls	Ashwani Vasishth (Ramapo)
Michelle Luebke (via phone)	Bill Montgomery (NJCU)
Sara Schultzer	Christ Davis Jackson (JC MUA)
Gabriel Ristorucci	Debra Italiano (SJC)
Mario Verdibello	Elizabeth Reynoso
	Karen Firehock (GIC)
	Marc Wesson (JCPC)

Prepared By: Karen Firehock and Gerry Nicholls

Date Prepared: 14 December 2014

ROLE CALL

Six of nine commissioners were present, which constituted quorum. Commissioners Latham and Holt were absent, Commissioner Luebke called in, and one commissioner position remains unfilled.

SUBCOMMITTEE REPORTS

Subcommittee reports were excused in light of the agenda to review and the draft Urban Tree Canopy Study data and results.

NEW BUSINESS

The following new business items were discussed:

Proposed Parking Ordinance

Commissioner Verdibello brought up the proposed idea to allow parking in the front yards of homes without driveways by making a 'cut out' in the front to allow a parking space next to a residential unit brought forward by Ward B Councilman Khemraj Ramchal. Commissioners discussed the role of the group in reviewing ordinances that may have an environmental impact. One commissioner stated her support for the ordinance since a lack of parking controls made it very difficult to find parking in her area. Others noted that taking up yards to provide parking

would create more stormwater problems and harm trees (potentially) and result in a net loss in available public parking. The discussion was tabled until the end of the meeting.

Meeting Minutes

The 16 September 2014 and 14 October 2014 Meeting Minutes were accepted.

Jersey City Shade Tree/Green Infrastructure Inventory by Karen Firehock and Andrew Walker, Green Infrastructure Center Inc. (GIC)

Reminder of Project Scope and EC Requests from Last Meeting: Karen Firehock reminded the commission where we are in the process. Permission to begin the work was provided in August. This is the first draft of the tree canopy map. At the project kick-off meeting held in August, the GIC presented the approach to be taken, examples of other urban green asset mapping projects and also solicited input on other useful products desired by the commission, such as fact sheets about the benefits of urban canopy.

She noted that while the tree canopy is the major piece of data funded by this project, other data would also be included on the final maps such as watersheds, parks and community gardens. There will be different data layers used to analyze the city's green assets. This work will also relate to other studies, such as the Coastal Resiliency Study.

Tree Canopy Status -- Present Maps and Discussion

i. Where is canopy doing well, lacking?

Andrew Walker presented the canopy map to the commissioners and members of the public. He noted that the map is very accurate. To perform the image classification, the GIC used the new Land Image Analyst software and field visits to identify “training samples” in the imagery in order to train the decision tree classification algorithm to recognize certain types of land cover, most importantly tree canopy.

Mr. Walker reviewed the methodology used to map the trees. The Land Image Analyst software was used to classify land cover imagery to identify impervious surfaces such as roads, rooftops, driveways and parking lots, as well as vegetation including trees and non-tree vegetation including shrubs, turf, wetlands grasses or other smaller scale plants.

The source of the imagery used is the National Agriculture Imagery Program (NAIP) and NAIP’s most current data are from August 2013. The only caveat is that it may not show newly planted trees because the imagery is from 12 months ago (the last time it was flown). It also may not show very small trees (e.g. 1 inch caliper trees, less than 6-8 feet tall). This is one area where additional field work may help to increase the accuracy. For example, students from NJCU might geo-locate new trees from known planting projects, such as trees recently added to Liberty Park.

The results from the analysis show that the canopy in Jersey City overall is 17 percent. Mr. Walker also provided the data showing tree coverage by neighborhood and by block. Commissioners also looked at the GIS data to zoom into particular areas they were familiar with

and compare those areas to the data results. Tree canopy is higher in some and lower in others, e.g. lower on the western side where there were more industrial sites and ports or higher in areas with large parks, such as Liberty State Park.

After some discussion, several commissioners asked if the data were what was expected. Ms. Firehock noted that a percent canopy recommended by the National Arbor Day Foundation for eastern U.S. cities is 40%. However, Jersey City is a very urban coastal city. She agreed with commissioners that it might be more useful to compare the city's number to similar sized eastern coastal cities. She will provide those comparisons at the next meeting.

ii. What are the opportunities to maintain/increase canopy?

One commissioner asked if the percentages included state owned and managed lands such as Liberty State Park. GIC staff replied that it did. Commissioners noted that the city could not control the state's tree management. Ms. Firehock noted that this is an example of a challenge that would be identified during the commission's strategic planning work. She reminded everyone that the tree canopy is key piece of environmental inventory data but much more work is needed to understand how to maintain, restore or improve canopy.

Ms. Firehock explained that there are many different types of programs that can be undertaken to enhance urban environmental assets such as tree canopy. For example, should we set goals by neighborhood? By zoning generally (e.g. residential, commercial)? Some areas can probably be greener than others, e.g. they have more opportunities to expand green space. Commissioners responded that it might be very helpful to provide canopy numbers by ward. GIC staff agreed to re-run the percentages by Ward once the city provides the mapped ward boundaries.

Another option could be to set goals by city master plans, e.g. an economic opportunity area or an area that will be redeveloping in the near term. City staff noted that there are so many master plans developed and in the works that this approach would likely prove too complex. One commissioner noted that they would like to see master plans include goals for tree canopy whenever possible.

Ms. Firehock explained that whatever we decide on will need to be tested before adopting a final goal to make sure it is realistic. (is there space, right zoning, right environmental conditions, public/private, funds?) She stated that some cities had adopted tree totals such as New York City's One Million Tree Goal. While this is impressive and ambitious, it may not be realistic. A good deal of reality testing will be needed to ensure that goals are realistic and doable.

Implementation could take many different forms. For example cities have different types of tree program for planting; citizen led, city led, local businesses initiatives and approaches that are incentive based or regulatory. A successful program will also need to address standards for tree care such as ensuring healthy trees, reducing maintenance costs or protecting investments by ensuring longevity. Poorly planted urban trees last an average of only eight years.

One member of the public noted that this will be difficult considering that the city does not even have an arborist. Ms. Firehock responded that the group needs to first understand the extent of

the city's current canopy, what are the benefits it provides and then the challenges and related opportunities. Having an arborist is a likely recommendation for implementation, but we are still in the evaluation and analysis stage.

How will you make the case: Ms. Firehock recapped some of the ideas from the last meeting for how to make the case. Urban trees can help with revitalizing business districts, attracting and retaining residents, reducing heat island effects, allowing fun ways for the public to participate in re-greening their city, meeting state and federal mandates for stormwater reduction and many more ideas. Protecting against storm impacts was also identified (need to have a way to care for storm damaged trees, too).

What else? The group brainstormed the benefits that they would like to calculate/present. They are as follows:

- ☐ Stormwater abatement
- ☐ Reducing 'heat island' effects
- ☐ Reducing CO_2 levels
- ☐ Improving property values
- ☐ Reducing crime
- ☐ Improving public health
- ☐ Providing recreation opportunities
- ☐ Increasing biodiversity
- ☐ Green connections to enhance walkability and link to existing city infrastructure
- ☐ Energy savings and affordability that comes from lower energy bills
- ☐ Classify the types of open space available (how socially/equitably distributed is it)
- ☐ Aesthetics (especially city gateways)
- ☐ Creating jobs
- ☐ Types of future projects possible, e.g. remediation
- ☐ Protecting native vegetation (also helps with protection from storm surge)

iii. Establish a Draft Goal for Canopy in the City (by city, by sector)

Reflecting on the commission's request to report tree canopy by ward, she returned to the question of how the commissioners would like to set a goal for the city -- by the entire city, by ward or both. The commissioners agreed that once they see the numbers they might want to strive to increase each ward's percentage of trees by two to three percent and perhaps by a greater number for those for which that is possible. The commission will also look to canopies for similar cities in setting relatable and realistic goals. They also determined the need to identify areas most in need and set priorities for where to start, e.g. prioritize areas with the least canopy or those that are rapidly redeveloping and which present immediate opportunities to have an impact.

What are Opportunities to Establish/Maintain Canopy (public and private property, street trees, parks etc.)

The commission noted the challenges of implementation and that there would need to be different strategies for public and private lands. They also stated that they needed to find a way

for better cooperation with state owned lands since areas, such as Liberty Park, are important contributors to city canopy.

The GIC emphasized the group's charge for this project is to develop strategies. The tree canopy data is a tool to help the commission understand existing conditions and to develop goals and related strategies. The GIC will help them evaluate if goals are realistic. For example, the commission may want to increase tree canopy by three percent, but it will take some work to determine where those trees can go (test the idea), evaluate current and future development (will current trees be removed, replaced?), and how are the city's trees cared for (will tree planting efforts be needed, can they be successful, funded?). In short, each goal will need to be reality tested.

One commissioner asked how existing street trees could be studied. Ms. Firehock explained that a tree survey of individual trees was not funded and is outside the scope of the current project. However, some assumptions can be made by using the general age of neighborhoods and structures along with canopy size to determine general tree age ranges and hypothesize whether the canopy in some neighborhoods is at risk (e.g. all the trees were planted in 1890, few new ones have been planted and trees are reaching the end of their life cycles. This is an example of tree loss through attrition (non-replacement). There could also be some pilot inventories with local university students.

Next Steps for GIC and the Commission:

1. Further investigation of key options (based on data and site visits)

2. Research on programs, options, policies for tree canopy management (and related greening initiatives) and sharing research with commissioners to prepare them for the next strategy session.

3. Development of key messages and fact sheets (see brainstormed list above)

4. Other outcomes from this meeting? Coordinate with JC Park Coalition, Parks Department, PSEG, and related city organizations.

CLOSING REMARKS AND OTHER BUSINESS BY COMMISSIONERS

The commission voted 5-0 to prepare a memorandum to the JC Planning Department opposing the proposed parking ordinance. Commissioner Ristorucci will draft the memo for EC comment and the memo will be submitted to the Planning Department by 24 November 2014.

GENERAL PUBLIC PARTICIPATION

Attendees were encouraged to offer feedback during the Tree Canopy Study presentation.

Adjournment

The meeting was adjourned at 8:30 p.m.

ACTION ITEMS

1. Commissioners to submit bios for website.

2. Commissioner Verdibello to coordinate a potential presentation to the Environmental Commission regarding the Genesis product that converts latent heat from light fixtures to supplemental light.

3. Commissioner Ristorucci to coordinate website updates and upgrades.

4. Tree Canopy Study data to be further reviewed and evaluated for subsequent meetings.

5. Submit memo opposing proposed parking ordinance.

NEXT MEETING

The next Environmental Commission is scheduled for 16 December 2014 at 6:30 p.m. in the Caucus Room, 2rd Floor, City Hall, 280 Grove Street.